

REMARKS

Claim 7 is amended, no claims are canceled, and no claims are added; as a result, claims 1-31 are now pending in this application.

Claim 7 was not amended in response to any rejection based on cited references, but was amended merely to correct a grammatical error by replacing the word "transmitting" with the word "transmit." No new matter has been added through the amendment to claim 7.

Interview Summary

Applicant thanks Examiner Krisna Lim for the courtesy of a telephone interview on February 24, 2006 with Applicant's representative attorney Robert Madden. Attorney Madden requested a clarification of statements in the Office Action, beginning on page 2 and continuing onto page 3 of the Office Action, related to a non-statutory double patenting rejection based on Application No. 10/007,064. Examiner Lim indicated in the telephone interview that this double patenting rejection was inadvertently included in the Office Action, and therefore that the statements related to a double patenting rejection should be disregarded.

Attorney Madden and Examiner Lim also discussed the 35 U.S.C. § 112 second paragraph rejection on page 2 of the Office Action, and the 35 U.S.C. §101 rejection on pages 3-4 of the Office Action.

§112 Rejection of the Claims

Claims 1-2 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. Although the Office Action only lists claims 1-2 in the paraphrased statement of the 35 U.S.C. § 112 second paragraph rejection, page 2 includes additional statements below the statement of rejection and directed at claims 3, 7, 10, 14, 18, 22, 26, and 27. As per the discussion during the telephone interview of February 24, 2006 mentioned above, Examiner Lim indicated that a response to each of the rejections on page 2 of the Office Action under item 2 relating to the 35 U.S.C. 112 second paragraph rejection needs to be included in Applicant's response.

Thus, Applicant respectfully traverses each of the 35 U.S.C. 112 second paragraph rejections of claims 1-3, 7, 10, 14, 18, 22, 26, and 27 for at least the reasons stated below.

Applicable Law and the MPEP

The Board of Patent Appeals and Interferences has stated:

In rejecting a claim under the second paragraph of 35 U.S.C. § 112, it is incumbent on the examiner to establish that one of ordinary skill in the pertinent art, when reading the claims in light of the supporting specification, would not have been able to ascertain with a reasonable degree of precision and particularity the particular area set out and circumscribed by the claims. *Ex parte Wu*, 10 USPQ 2d 2031, 2033 (B.P.A.I. 1989)(citing *In re Moore*, 439 F.2d 1232, 169 USPQ 236 (C.C.P.A. 1971); *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (C.C.P.A. 1970)).

The M.P.E.P. adopts this line of reasoning, stating that:

The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (1) The content of the particular application disclosure;
- (2) The teachings of the prior art; and
- (3) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. *M.P.E.P.* § 2173.02.

Applicant respectfully submits that the claim language in each of the claims in question, when analyzed in light of the content of the supporting specification, is not indefinite.

Claims 1 and 26

The Office Action on page 2 makes general statements regarding claims 1 and 26, claims 2 and 27, claim 3, claim 7, claim 10, claim 14, claim 18, and claim 22. For example, the Office Action on page 2 states, "In claims 1 and 26, it is unclear how a device is discovered. It is unclear from where and to where the encoded name is transmitted across a network."

In response to all of the general statements, and by way of example and not by way of limitation to any particular portion of the specification, Applicant directs attention to the written description of the application on page 3, line 18 through page 5, line 11 which states:

Fig. 1 depicts example system 100, including a network of computer systems and devices that can be used to implement an

embodiment of the invention. Host computer 105 is communicatively coupled to channel fabric 110, which is communicatively coupled to client computer 115, which is communicatively coupled to network 120. Network 120 is communicatively coupled to server computer 125, which is communicatively coupled to channel fabric 130, which is communicatively coupled to device 135.

Host 105 is a computer that wishes to store and/or retrieve data to/from device 135. In one embodiment, host 105 interfaces to channel fabric 110 as if host 105 were directly attached to device 135, so that host 105 has no knowledge of the existence of client 115, network 120, server 125, or channel fabric 130.

Channel fabric 110 transfers data between host 105 and client 115. Channel fabric 130 transfers data between server 125 and device 135. In one embodiment, channel fabric 110 and 130 are implemented using the Fibre Channel I/O (Input/Output) protocol. Fibre Channel is an asynchronous, serial I/O protocol that is unaware of the content or meaning of the information being transferred. In other embodiments, any suitable I/O protocol can be used, such as the SCSI (Small Computer System Interface) or IDE (Integrated Device Electronics) protocols.

Networked systems often follow a client/server architecture. In one embodiment, a client is a process (i.e., a program or task) executing on a computer that requests a service provided by another program or computer. In another embodiment, the client is the computer itself. The client utilizes the requested service without needing to know any working details about the other program or the service itself. In networked systems, a client is usually a computer that accesses shared network resources provided by another computer, such as server.

Client 115 decodes the name of device 135, which client 115 retrieves across network 120 from server 125 and presents the decoded name to host 105 via channel fabric 110. In one embodiment, client 115 emulates the interface of device 135, meaning that client 115 appears to host 105 as if client 115 were actually device 135. Client 115 is further described below with reference to Fig. 2A.

Network 120 can include many servers and/or many clients, which act to pass information between them. In one embodiment, network 120 utilizes the TCP/IP protocol. TCP/IP is an acronym for "Transport Control Protocol/Internet Protocol," a protocol developed by the Department of Defense for facilitating communications between computers. In one embodiment, iSCSI protocol commands are sent through network 120 using TCP/IP. iSCSI is a protocol for sending SCSI (Small Computer System Interface) commands over the Internet. SCSI is

a standard high-speed parallel interface defined by the X3T9.2 committee of the American National Standards Institute (ANSI).

Server 125 is a computer remote from client 115 over the network 120. Based on requests from client 115, server 125 scans and searches for information sources and presents filtered, electronic information to client 115 as server responses. Server 125 is thus a network computer that runs administrative software that controls access to all or part of a network and its resources, such as data on device 135. Server 125 is further described below with reference to Fig. 2B.

In addition, various other portions of the specification provide additional support for the material quoted above, including but not limited to the written description on page 6 at lines 7-21, and Fig. 1, Fig. 2A, and Fig. 2B.

Applicant submits that, when viewed in light of the supporting specification, in at least but not limited to the portions as noted above, claims 1-3, 7, 10, 14, 18, 22, and 26-27 are not indefinite, and comply with the requirements of 35 U.S.C. § 112 second paragraph. Applicant respectfully requests withdrawal of the 35 U.S.C. § 112 rejection of claims 1-3, 7, 10, 14, 18, 22, and 26-27, and allowance of these claims.

Double Patenting Rejection

The Office Action on page 3 states, "Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of co-pending Application No. 10/007,064."

Based on the above mentioned telephone interview, Applicant's representatives believe this rejection is not applicable to the pending claims, and therefore no response is required.

§101 Rejection of the Claims

Claims 18-25 were rejected under 35 U.S.C. § 101 because the claimed invention is alleged to be directed to non-statutory subject matter as being an intangible media (e.g., a signal-bearing media) and an abstract idea. Applicant respectfully traverses the 35 U.S.C. § 101 rejection of claims 18-25.

Applicant believes that the language of claims 18-25 is clearly directed to statutory subject matter under 35 U.S.C. § 101. By way of example, and not by way of limitation, the

recitation of claim 18 describe a signal-bearing media bearing instructions that when read and executed by a server comprise discovering a device, determining a name associated with the device, wherein the name is in a first protocol format, encoding the name into a second protocol format, and transmitting the name across the network.

In another example, and not by way of limitation, claim 22 includes a signal-bearing media bearing instructions that when read and executed by a client comprise receiving an encoded name in a second protocol format across a network; decoding the encoded name from the second protocol format into a name in a first protocol format; and sending the name to a host.

These elements as included in claims 18-25 are useful because, as pointed out for example in the written description of the application on page 1, line 26 through page 2, line 2, "Previous systems required the user to manually determine the identifiers (names) of the available devices attached to other computers on the network and enter these identifiers into the user's own computer. This manual process is inefficient, error prone, and annoying for the user." Claims 18-25 are directed toward, but not limited to, a solution that allows one computer to automatically determine the identifiers of devices attached to remote commuters, and thus provides a useful way of operating networks of computers.

The Office Action on page 4 states that claims 18-25 are directed to non-statutory subject matter as being intangible (e.g. a signal-bearing media) and an abstract idea. Applicant submits that there is no requirement that statutory subject matter be tangible.

Further, Applicant respectfully submits that upon reading the specification and claims of the present patent application, one would see that the present invention as included in claims 18-25 has practical application in the technological arts. The claims do not describe merely functional descriptive material, non-functional descriptive material, or a natural phenomenon. Some of the pending claims describe functions to be performed on a computer network, and other pending claims describe one or more specific protocols and devices. Applicant believes that upon evaluation of the claims, one would find that the functions, processes, and devices described by claims 18-25 include significant pre-computer processing activity (e.g., discovering a device) and post-computer processing activity (e.g., transmitting the encoded name across a network). See *Examination Guidelines for Computer-Related Inventions*, 61 Fed. Reg. 7478,

March 29, 1996, effective date March 29, 1996. As such, Applicant respectfully believes the claimed invention is directed to statutory subject matter.

Applicant further respectfully submits that the rejection fails to make a *prima facie* case to support the conclusion that the claims are directed to non-statutory subject matter. There are no clear statements of why the claimed invention is an abstract idea, other than that it is "intangible media." The rejection fails to point to specific disclosure portions that support a non-statutory conclusion. See also, Training Materials Directed To Business, Artificial Intelligence, and Mathematical Processing Applications, www.uspto.gov/web/offices/pac/comexam/comguide.htm. Applicant respectfully submits that the rationale provided in the Office Action to support the non-statutory subject matter rejection is unsupported by the facts. Therefore, Applicant respectfully traverses the non-statutory subject matter rejection of claims 18-25 under 35 U.S.C. § 101, and requests removal of this rejection.

§103 Rejection of the Claims

Claims 1-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Punj (U.S. Patent No. 5,289,579) in view of Gioquindo et al. (U.S. Patent No. 6,334,154). Applicant respectfully traverses the 35 U.S.C. § 103(a) rejection of claims 1-31.

Applicable Law

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To do that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id.*

The *Fine* court stated that:

Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so." *Id.* (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. **First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.** Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *n re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)). (Emphasis added).

Further, The Office Action must provide specific, objective evidence of record for a finding of a teaching, suggestion, or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338 (Fed. Cir. 2002).

The Office Action fails to state a prima facie case of obviousness with respect to claims 1-31 because the Office Action fails to show how the proposed combination of Punj and Gioquindo et al. teaches or suggests all of the elements included in claims 1-31.

The Office Action fails to show where in Punj there is a teaching or suggestion of several of the elements included in claims 1-31.

For example, the Office Action fails to point out where in Punj there is a teaching or suggestion of discovering a device, as recited in claim 1. Further, claim 1 includes a recitation of "transmitting the encoded name across a network." The Office Action fails to point out where transmitting the encoded name across a network, as recited in claim 1, is taught or suggested in Punj.

In another example, claim 2 recites,

receiving the encoded name in the second protocol format across the network;
decoding the encoded name from the second protocol format into the name in the first protocol format; and
sending the name to a host.

The Office Action is completely devoid of any statements showing how Punj teaches or suggests these elements as recited in claim 2.

In further examples:

Claim 7 as amended recites,

- a channel adapter to discover a device and determine a name associated with the device, wherein the name is in a first protocol format;
- an encoder to encode the name into a second protocol format; and
- a network adapter to transmit the encoded name across a network.

Claim 10 recites,

- a network adapter to receive an encoded name in a second protocol format across a network;
- a decoder to decode the encoded name from the second protocol format into a name in a first protocol format; and
- a channel adapter to send the name to a host.

Claim 14 recites,

- a device;
- a server communicatively coupled to the device via a first channel fabric, wherein the server comprises:
 - a first channel adapter to discover a device and determine a name associated with the device, wherein the name is in a first protocol format,
 - an encoder to encode the name into a second protocol format, and
 - a first network adapter to transmitting the encoded name across a network;
- a client communicatively coupled to the server via a network, wherein the client comprises:
 - a second network adapter to receive an encoded name in a second protocol format across a network,
 - a decoder to decode the encoded name from the second protocol format into a name in a first protocol format, and
 - a second channel adapter to send the name to a host; and
- a host communicatively coupled to the client via a second channel fabric.

Claim 18 recites,

discovering a device;
determining a name associated with the device, wherein the name
is in a first protocol format;
encoding the name into a second protocol format; and
transmitting the encoded name across a network.

Claim 22 recites:

receiving an encoded name in a second protocol format across a
network;
decoding the encoded name from the second protocol format into a
name in a first protocol format; and
sending the name to a host.

Claim 26 recites,

means for discovering a device;
means for determining a name associated with the device, wherein
the name is in a first protocol format;
means for encoding the name into a second protocol format; and
means for transmitting the encoded name across a network.

For reasons analogous to those stated above with respect to claims 1 and 2, the Office Action fails to show how Punj teaches or suggests the elements included in claims 7, 10, 14, 18, 22, and 26.

Claims 2-6, 8-9, 11-13, 15-17, 19-21, 23-25, and 27-31 depend from claims 1, 7, 10, 14, 18, 22, and 26 respectively, and thus include all of the elements recited in the claim from which they depend. Therefore, the Office Action fails to show how Punj teaches or suggests all of the elements included in claims 2-6, 8-9, 11-13, 15-17, 19-21, 23-25, and 27-31.

Applicant's representative's fail to find in, and the Office Action fails to point out, where the additional reference of Gioquindo et al. teaches or suggests the elements included in claims 1-31 and missing from Punj. Because the Office Action fails to show where the cited references of Punj and Gioquindo et al. teach or suggest all of the elements included in claims 1-31, the Office Action fails to state a *prima facie* case of obviousness with respect to claims 1-31.

The Office Action fails to state a prima facie case of obviousness with respect to claims 1-31 because the Office Action fails to provide specific, objective evidence of record for a finding of a teaching, suggestion, or motivation to combine Punj with Gioquindo et al.

The Office Action on page 5 states,

Such compatible feature of allowing data with different protocol formats to be transmitted among clients and servers would have been a desirable feature in the art, thus it would have been obvious to one of ordinary skill in the art to combine the teaching of Gioquindo's address resolution protocol into Punj's address conversion (e.g. see the abstract, Figs. 5-7, col. 6(lines 1-34), col. 10(lines 6-45).

Applicant does not agree, and further, submits that a statement that the combination would have been desirable fails to meet the requirements for providing specific, objective evidence of record for a finding of a teaching, suggestion, or motivation to combine Punj with Gioquindo et al. The statements in the Office Action appear to be merely an attempt to reconstruct the invention of claim 1-31 using Applicant's disclosure and employing impermissible hindsight, and so fails to meet the requirements as established in the case law and the MPEP as quoted above.

Because the Office Action fails to meet these requirements for making the proposed combination of Punj and Gioquindo et al., the Office Action fails to state a *prima facie* case of obviousness with respect to claims 1-31.

For at least the reasons stated above, Applicant respectfully requests withdrawal of the rejections and reconsideration and allowance of claims 1-31.

Reservation of Rights

Applicant does not admit that references cited under 35 U.S.C. §§ 102(a), 102(e), 103/102(a), or 103/102(e) are prior art, and reserves the right to swear behind them at a later date. Arguments presented to distinguish such references should not be construed as admissions that the references are prior art.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at 612-371-2132 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 28th day of February, 2006.

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